

The following were developed by David D. Baltensperger, University of Nebraska, Panhandle Res. & Ext. Center, 4502 Avenue I, Scottsbluff, Nebraska 69361-4939, United States. Received 02/25/1994.

PI 578073. *Panicum miliaceum* L.

Cultivar. "EARLYBIRD"; 87041. CV-170. Pedigree - Increase of white proso F3 derived F4 line from Minco/NE76010/Rise/NE79017. NE760101 is sel. from Dawn/ Panhandle and NE79017 is sel. from Dawn/NE760101. Seed coat (lemma and palea) white. Panicle compactum type (closed). Foliage green in color and similar to Sunup. Cool growing conditions increase incidence of red pigmentation in foliage. Yield potential similar to Sunup, 6% more than Rise, and 41% more than Dawn. Seed size (684 seeds per 5g) larger than all previously released cultivars. Average 4% larger seed size compared to Dawn, and 6% larger than Sunup and Snowbird. Straw strength similar to Sunup and better than other cultivars with similar plant height. Maturity intermediate between Dawn and Sunup.

The following were developed by L.A. Nelson, Nebraska Agr. Exp. Sta., University of Nebraska-Lincoln, Lincoln, Nebraska 68583-0915, United States; David D. Baltensperger, University of Nebraska, Panhandle Res. & Ext. Center, 4502 Avenue I, Scottsbluff, Nebraska 69361-4939, United States; G.E. Frickel, Panhandle Res. and Ext. Center, University of Nebraska, Scottsbluff, Nebraska 69361, United States; R.L. Anderson, USDA, ARS, Central Great Plains Res. Station, Akron, Colorado 80720, United States. Received 02/25/1994.

PI 578074. *Panicum miliaceum* L.

Cultivar. Pureline. "HUNTSMAN"; 870063. CV-175. Pedigree - Increase of white proso F3 derived F4 line from NE79012/NE79017/3/Cope//Dawn/Common. NE79012 is sel. from Dawn/NE76004 and NE79017 is sel. from Dawn NE76010. NE76004 is sel. fr Dawn/Min 402 & NE76010 is sel. fr Dawn/Panhandle. Seed coat white. Panicle compactum closed type. Foliage green and similar to Sunup. Yield potential similar to Sunup, 11% more than Rise, and 46% more than Dawn. Maturity intermediate between Cope and Sunup and later in maturity than all previous Nebraska releases. Seed size (711 seeds per 5g) larger than all previously released cultivars except Dawn. Averaged 2% larger seed size than Sunup & Snowbird and 5% larger than Rise. Straw strength similar to Sunup & better than other cvs. with similar plant height. Plant height intermediate between Rise & Sunup.

The following were developed by William F. Grant, Macdonald Campus of McGill University, Department of Plant Science, P.O. Box 4000, Ste Anne De Bellevue, Quebec H9X 3V9, Canada; R.B. McDougall. Received 02/25/1994.

PI 578075. *Lotus corniculatus* L.

Breeding. H401-4-4-2. GP-136. Pedigree - Field selection originating from in vitro herbicide exposure. Source of resistance to the sulfonylurea (SU) herbicide thifensulfuron-methyl (Du Pont, DPX-M6316; Harmony; 3-[[[(4-methoxy-6methyl-1,3,5, triazine-2-yl) amino] carbonyl] amino] sulfonyl-2-thiophenecarboxylate). Field selection originating from in vitro herbicide exposure. Callus was tested on selection media (10⁻⁷, 2.5 x 10⁻⁷, 5 x 10⁻⁷, 7.5 x 10⁻⁷, 10⁻⁶, and 2.5 x 10⁻⁶ M SU) for six passages. Tolerant lines were field tested with 0.0, 30.0, 60.0, and 100.0g SU a.i./ha. Tolerant to 100g SU a.i./ha. The trait is heritable.

The following were developed by J.D. Kelly, Michigan Agr. Exp. Sta., Michigan State University, Dept. of Crop and Soil Sciences, East Lansing, Michigan 48824-1325, United States; George L. Hosfield, USDA, ARS, Michigan State University, Department of Crop & Soil Science, East Lansing, Michigan 48824, United States; Greg Varner, Dry Edible Bean Research, Advisory Board, 3066 S.